

Constant Voltage 4 Channel DMX/RDM Decoder

- Standard DMX/RDM interfaces; Set addresses via the digital display and buttons. RDM protocol;
- Browse parameters and change DMX addresses via a RDM master or via the mobile APP .
- DMX mode and customized mode can be switched.
PWM frequency options: 300/600/1200/1500/1800/2400/3600/7200/10800/14400/18000Hz.
- 16bit (65536 levels)/8bit (256 levels) gray scale optional.
- Two dimming mode options: standard and smooth dimming.
- Set 1/2/3/4 DMX channel output.
- Provide 10 lighting effects, 8 speed levels of dynamic modes, and 255 brightness levels. Set screen timeout, LCD screen always on, and screen turning off after 30s of inactivity. Short circuit, over-temperature, over-current protection and auto recovery.
- 16.4 feet Max recommended distance to LED load, output side, consult factory on longer distances



D4B



Product Parameters

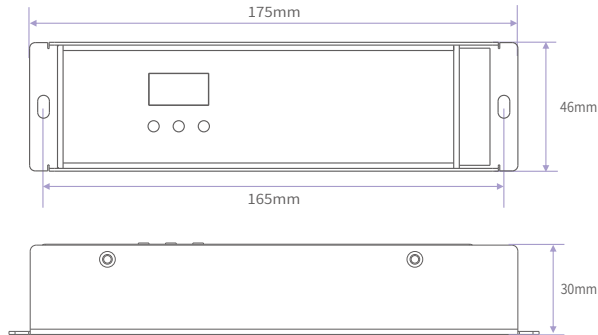
| | |
|-----------------|--|
| Model | D4B |
| Input Signal | DMX512,RDM |
| Input Voltage | 12-48V |
| Output Type | Constant Voltage/PWM frequency 1800 Hz default, user selectable options between 300 Hz and 18000 Hz. |
| Output Current | NEC Class 2 limits apply; to maintain Nova Flex UL listing on attached LEDs. Only power with Class 2 compliant power source. |
| Output Voltage | 4 × (12-48V) |
| Output Power | NEC Class 2 limits apply; to maintain Nova Flex UL listing on attached LEDs. Only power with Class 2 compliant power source. |
| Dimming Range | 0-100% |
| DMX Signal Port | RJ45 |
| Working Temp. | -25°C – 55°C |
| Safety & Emc | CE, EN 55015: 2019/A11: 2020, EN IEC 61000-3-2: 2019+A1: 2021, EN 61000-3-3: 2013+A1: 2019+A2: 2021, EN 61547-1: 2021 |
| | FCC Part 15 Class B |
| Max Run Length | 16.4 feet Max recommended distance to LED load, output side, consult factory on longer distances.* |
| Dimensions | L175×W46×H30mm |
| Package Size | L187×W52×H36mm |
| Weight [G.W.] | [325g±5g] |
| Protection | Short Circuit, over temperature, over current protection, auto recovery |

*DMX cable <= 500 feet total without amplification.

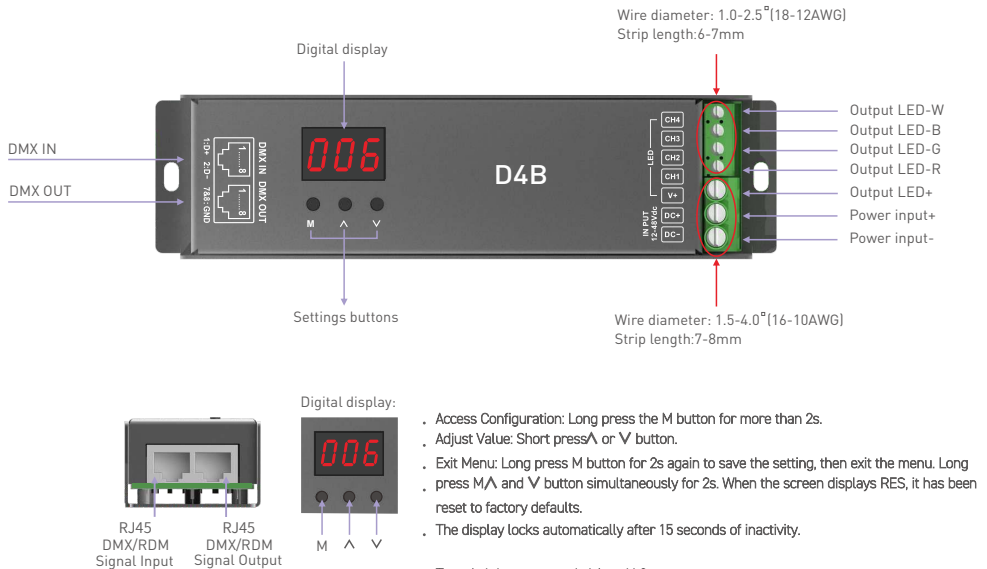
Power Supply to decoder input, consult voltage drop tables limit to < 5% drop at full anticipated load.

Product Size

Unit: mm



Main Component Description



- Access Configuration: Long press the M button for more than 2s.
- Adjust Value: Short press A or V button.
- Exit Menu: Long press M button for 2s again to save the setting, then exit the menu. Long press M/A and V button simultaneously for 2s. When the screen displays RES, it has been reset to factory defaults.
- The display locks automatically after 15 seconds of inactivity.

To switch between mode L1 and L2:
Press M and A for >2s to select L1
Press M and V for >2s to select L2

OLED Display Interface

DMX decoder mode



Long press M and V button simultaneously. When the screen displays "L-1", it enters the DMX decoder mode. Long press M button for 2s to enter the menu.

Press M and ^ switches from L-2 to L1

Press M and V for >2s then ^ to go from L-1 to L2

1. DMX address settings



Press ^ or V button to set the DMX address.

DMX address range: 001-512

2. Resolution



Short press M button to switch the menu to "r".

Press ^ or V button to select resolution and the third value on the screen will display 1 or 2.

Options: **r-1 (8bit)**
r-2 (16bit)

3. PWM frequency



Short press M button to switch the menu to "F".

Press ^ or V button to select PWM frequency and the third value on the screen will display H or L.

| | | | |
|------------------------------|---------------|---------------|--------------|
| Options: F-4 (1800Hz) | F-0 (300Hz) | F-1 (600Hz) | F-2 (1200Hz) |
| F-3 (1500Hz) | F-5 (2400Hz) | F-6 (3600Hz) | F-7 (7200Hz) |
| F-8 (10800Hz) | F-9 (14400Hz) | F-A (18000Hz) | |

4. Dimming mode



Short press M button to switch the menu to "d".

Press ^ or V button to select the dimming mode and the third value on the screen will display 1 or 2.

Options: **d-1 (Smooth dimming)**
d-2 (Standard dimming)

5. DMX channels



Short press M button to switch the menu to "C".

Press ^ or V button to select the channels and the third value on the screen will display 1, 2, 3 or 4.

Options: **C-4 (4 channel output occupies corresponding 4 DMX addresses)**

C-1 (4 channel output occupies DMX address 1)

C-2 (1 and 3 channel output occupy DMX address 1, 2 and 4 channel output occupy DMX address 2) *See Address Setting Table on Page 5*

C-3 (1 channel output occupies DMX address 1, 2 channel output occupies DMX address 2, 3 and 4 channel output occupy DMX address 3)

Does not increase # of address (fixtures) to choose an option less than 4

6. Screen timeout



Short press M button to switch the menu to "n".

Press ^ or V button to select screen timeout and the third value on the screen will display 1 or 2.

Options: **n-1 (Screen stays on)**
n-2 (Screen turns off after 30seconds of inactivity)

Customized mode



Custom Mode Interface

1. Lighting effects



e.g. E-1 (no lighting effect)



e.g. E-A (7-color gradient)

Long press M and V button simultaneously. When the screen displays "L-2", it enters the customized mode. Long press M button for 2s to enter the menu.

Short press M button to switch the menu to "E".

Press ^ or V button to select the lighting effect and the third value on the screen will display 1, 2, 3, 4, 5, 6, 7, 8, 9 or A.

Options: E-1 (No lighting effect) E-6 (Purple)
 E-2 (Red) E-7 (Cyan)
 E-3 (Green) E-8 (White)
 E-4 (Blue) E-9 (7-color jumping)
 E-5 (Yellow) E-A (7-color gradient)

2. Color-changing speed



Short press M button to switch the menu to "S".

Press ^ or V button to select speed and the third value on the screen will display 1, 2, 3, 4, 5, 6, 7 or 8.

Default: S-5

Options: S-1 / S-2 S-7 / S-8

Speed levels, speed increases one by one

3. Brightness



Short press M button to switch the menu to "B".

Press ^ or V button to select the brightness level and the third value on the screen will display 1, 2, 3, 4, 5, 6, 7 or 8.

B00-BFF, 255 levels, default maximum level is 255

Options: B00 / B01 BFF

Brightness levels, brightness increases one by one

4. Screen timeout



Short press M button to switch the menu to "n".

Press ^ or V button to select screen timeout and the third value on the screen will display 1 or 2.

Options: n-1 (Screen stays on)
 n-2 (Screen turns off after 30 seconds of inactivity)

Fault code



F-0: Over-temperature protection

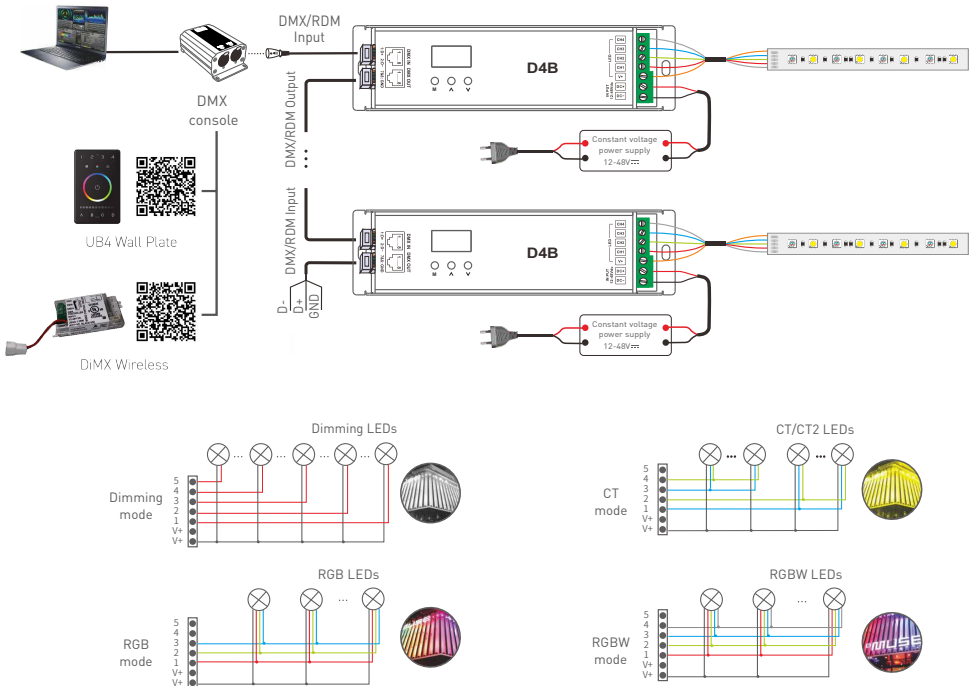
F-1: Over-temperature warning

F-2: Short circuit/over-current protection

Address setting table

| DMX Channel Addresses ↓ | | | | |
|-------------------------|--------------|-------------|----------|-----------|
| Mode | C-1(Dimming) | C-2(CT/CT2) | C-3(RGB) | C-4(RGBW) |
| Channel 1 | 001 | 001 | 001 | 001 |
| Channel 2 | 001 | 002 | 002 | 002 |
| Channel 3 | 001 | 001 | 003 | 003 |
| Channel 4 | 001 | 002 | 003 | 004 |

D4B Wiring Diagram



- * When more than 32 DMX decoders are connected, DMX signal amplifiers are needed and signal amplification should not be more than 5 times continuously. If you need to modify the parameter settings of connected DMX/RDM decoders that exceed 32, you can add 1 RDM signal amplifier. Or you can add 1-5 DMX signal amplifiers after completing the parameter settings.
- * If the recoil effect occurs because of long signal line or poor quality wires, please try to connect a 0.25W 90-120Ω terminal resistor at the end of each line.

Important

- This product must be installed and adjusted by a qualified professional.
 - LTECH products are not lightning-proof or waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a waterproof enclosure or in an area equipped with lightning protection devices.
 - Good heat dissipation will extend the life the product. Please install the product in a environment with good ventilation.
 - When you install this product, please avoid being near a large area of metal objects or stacking them to prevent signal interference.
 - Please keep the product away from a intense magnetic field, a high pressure area or a place where lightning is easy to occur.
 - Please check whether the working voltage used complies with the parameter requirements of the product.
 - Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
 - If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, please contact the supplier.
- * This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.